What is claimed is:

1. A development apparatus comprising:

a housing in which a developer supplying/collecting unit and a developer stirring unit are arranged in a front-and-rear direction, the developer supplying/collecting unit and the developer stirring unit together forming a circular passage so as to communicate each other for carrying two-component developer which is composed of toner and carrier;

a developer carrying member which is placed at a front side portion of the developer supplying/collecting unit so as to face a latent image carrying member with respect to a development region;

a developer supplying/collecting section for carrying the developer in a rotation axis direction thereof by being rotated, the developer supplying/collecting section placed at a rear side portion of the developer supplying/collecting unit so as to face the developer carrying member and to extend along a rotation axis direction of the developer carrying member; and

two developer stirring sections which are arranged in the front-and-rear direction in the developer stirring unit so as to face each other and to extend along a rotation axis direction of the developer supplying/collecting section,

wherein, in the housing, a toner supplying opening is formed above a position where the two developer stirring

sections of the developer stirring unit face each other and at an upstream side in a developer carrying direction in the developer stirring unit,

the two developer stirring sections are rotated at the position where the two developer stirring sections face each other so as to move peripheries thereof up to down in a forward direction to each other,

the developer carrying direction by the two developer stirring sections is substantially opposite to a developer carrying direction by the developer supplying/collecting section, and

developer carrying capability of each of the two developer stirring sections is set so as to make sum total of developer carrying amount by the two developer stirring sections equal to that by the developer supplying/collecting section.

2. The apparatus of claim 1, wherein

one of the two developer stirring sections in the developer stirring unit carries the developer in a direction opposite to a direction in which the developer supplying/collecting section carries the developer and has the developer carrying capability in the rotation axis direction equal to that of the developer supplying/collecting section, and

another developer stirring section has substantially

no developer carrying capability in the rotation axis direction.

3. The apparatus of claim 2, wherein, in the developer stirring unit, another developer stirring section having substantially no developer carrying capability in the rotation axis direction is placed at a rear side with respect to the developer supplying/collecting unit.

4. The apparatus of claim 3, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

5. The apparatus of claim 2, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member,

one of the two developer stirring sections comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, the stirring member carrying the developer in a direction opposite to a direction in which the developer supplying/collecting section carries the developer with the

developer stirred, and has the developer carrying capability in the rotation axis direction equal to that of the developer supplying/collecting section, and

another developer stirring section comprises a plurality of plate-like stirring members with a shaft member passing through, the plurality of stirring members inclined in a same direction with respect to the shaft member, and has substantially no developer carrying capability in the rotation axis direction.

6. The apparatus of claim 5, wherein, in the developer stirring unit, another developer stirring section having substantially no developer carrying capability in the rotation axis direction is placed at a rear side with respect to the developer supplying/collecting unit.

7. The apparatus of claim 6, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

8. The apparatus of claim 2, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis

direction throughout an outer periphery of a shaft member,

one of the two developer stirring sections comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, the stirring member carrying the developer in a direction opposite to a direction in which the developer supplying/collecting section carries the developer with the developer stirred, and has the developer carrying capability in the rotation axis direction equal to that of the developer supplying/collecting section, and

another developer stirring section comprises a stirring member comprising a rib placed on an outer periphery of a shaft member or at a position with being apart from each other with respect to the shaft member in a radial direction so as to extend along the rotation axis direction, and has substantially no developer carrying capability in the rotation axis direction.

9. The apparatus of claim 8, wherein, in the developer stirring unit, another developer stirring section having substantially no developer carrying capability in the rotation axis direction is placed at a rear side with respect to the developer supplying/collecting unit.

10. The apparatus of claim 9, wherein the two-component developer is composed of the toner having a

volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

11. The apparatus of claim 1, wherein both the two developer stirring sections in the developer stirring unit carry the developer in a direction opposite to a direction in which the developer supplying/collecting section carries the developer, and have the developer carrying capability so as to make the sum total of the developer carrying amount by the two developer stirring sections in the rotation axis direction equal to that by the developer supplying/collecting section.

12. The apparatus of claim 11, wherein one of the two developer stirring sections in the developer stirring unit has the developer carrying capability in the rotation axis direction lower than or equal to that of another developer stirring section, and is placed at a rear side with respect to the developer supplying/collecting unit.

13. The apparatus of claim 12, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner

by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

14. The apparatus of claim 11, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member,

one of the two developer stirring sections comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, and

another developer stirring section comprises a plurality of semioval first stirring members and a plurality of semioval second stirring members on an outer periphery of a shaft member, the plurality of first stirring members being placed along a first stirring member arrangement plane, the plurality of second stirring members being placed along a second stirring member arrangement plane, the first stirring member arrangement plane and the second stirring member arrangement plane being inclined in different directions from each other with respect to a plane perpendicular to the shaft member.

15. The apparatus of claim 14, wherein another developer stirring section in the developer stirring unit has the developer carrying capability in the rotation axis

direction equal to or lower than that of the one developer stirring section, and is placed at a rear side with respect to the developer supplying/collecting unit.

16. The apparatus of claim 15, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

17. The apparatus of claim 11, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member,

one of the two developer stirring sections comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, and

another developer stirring section comprises a stirring member comprising a rib placed on an outer periphery of a shaft member or at a position with being apart from each other with respect to the shaft member in a radial direction so as to extend along the rotation axis direction.

18. The apparatus of claim 17, wherein another developer stirring section in the developer stirring unit has the developer carrying capability in the rotation axis direction equal to or lower than that of the one developer stirring section, and is placed at a rear side with respect to the developer supplying/collecting unit.

19. The apparatus of claim 18, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

20. The apparatus of claim 1, wherein

one of the two developer stirring sections in the developer stirring unit carries the developer in a same direction as a direction in which the developer supplying/collecting section carries the developer, and has the developer carrying capability in the rotation axis direction lower than that of the developer supplying/collecting section, and

another developer stirring section carries the developer in a direction opposite to a direction in which the developer supplying/collecting section carries the developer, and has the developer carrying capability so as

to make the developer carrying amount by another developer stirring section equal to the sum total of that by the developer supplying/collecting section and the one developer stirring section.

21. The apparatus of claim 20, wherein, in the developer stirring unit, another developer stirring section having higher developer carrying capability is placed at a rear side with respect to the developer supplying/collecting unit.

22. The apparatus of claim 21, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

23. The apparatus of claim 20, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member,

the one of the two developer stirring sections having lower developer carrying capability, comprises a plurality of semioval first stirring members and a plurality of oval-semioval second stirring members on an outer periphery of a

shaft member, the plurality of first stirring members being placed along a first stirring member arrangement plane, the plurality of second stirring members being placed along a second stirring member arrangement plane, the first stirring member arrangement plane and the second stirring member arrangement plane being inclined in different directions from each other with respect to a plane perpendicular to the shaft member, and has the developer carrying capability in the rotation axis direction lower than that of the developer supplying/collecting section, and

another developer stirring section having higher developer carrying capability, comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, and has the developer carrying capability so as to make the developer carrying amount by another developer stirring section equal to the sum total of that by the developer supplying/collecting section and the one developer stirring section.

24. The apparatus of claim 23, wherein, in the developer stirring unit, another developer stirring section having higher developer carrying capability is placed at a rear side with respect to the developer supplying/collecting unit.

25. The apparatus of claim 24, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

26. The apparatus of claim 20, wherein

the developer supplying/collecting section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member,

the one of the two developer stirring sections having lower developer carrying capability, comprises a stirring member comprising a rib placed on an outer periphery of a shaft member or at a position with being apart from each other with respect to the shaft member in a radial direction so as to extend along the rotation axis direction, and has the developer carrying capability in the rotation axis direction lower than that of the developer supplying/collecting section, and

another developer stirring section comprises a stirring member extending spirally in the rotation axis direction throughout an outer periphery of a shaft member, and has the developer carrying capability so as to make the developer carrying amount by another developer stirring

section equal to the sum total of that by the developer supplying/collecting section and the one developer stirring section.

27. The apparatus of claim 26, wherein, in the developer stirring unit, another developer stirring section having higher developer carrying capability is placed at a rear side with respect to the developer supplying/collecting unit.

28. The apparatus of claim 27, wherein the two-component developer is composed of the toner having a volume average particle diameter of 3 μm to 5 μm, and, denoting the volume average particle diameter of the toner by Dt (μm), the carrier having volume average particle diameter of 5 x Dt to 10 x Dt.

29. An image formation apparatus comprising a latent image carrying member, and a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member,

wherein the toner image formation section includes the development apparatus of claim 1, and

following conditions (1) and (2) are satisfied:

Condition (1); $W \geq M \times V \times L/1000$

Condition (2); $R \leq 600$

where V represents a moving speed (mm/sec) of the latent image carrying member, M represents maximum toner amount attaching to one unit area in the toner image formed on the latent image carrying member (mg/cm^2), L represents maximum width (mm) of the toner image formed on the latent image carrying member in a direction perpendicular to a moving direction of the latent image carrying member, W represents developer carrying amount (g/sec) by the developer supplying/collecting section in the rotation axis direction, and R represents rotation number of the developer supplying/collecting section.

30. A image formation apparatus comprising a latent image carrying member, a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member, a transferring section for transferring the toner image on the latent image carrying member to transferring material or an intermediate transferring member, a cleaning section for removing toner remained on the latent image carrying member after the toner image is transferred, and a toner recycling section for collecting the toner removed from the latent image carrying member to be reused,

wherein the toner image formation section includes the development apparatus of claim 1, and

in the housing of the development apparatus, a

recycled toner mixing opening is placed above the position where the two developer stirring sections face each other and at an upstream side with respect to the toner supplying opening in the developer carrying direction in the developer stirring unit, for mixing the toner collected by the toner recycling section into the developer stirring unit.

31. An image formation apparatus comprising a latent image carrying member and a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member,

wherein the toner image formation section includes the development apparatus of claim 2, and

following conditions (1) and (2) are satisfied:

Condition (1); $W \geq M \times V \times L/1000$

Condition (2); $R \leq 600$

where V represents a moving speed (mm/sec) of the latent image carrying member, M represents maximum toner amount attaching to one unit area in the toner image formed on the latent image carrying member (mg/cm^2), L represents maximum width (mm) of the toner image formed on the latent image carrying member in a direction perpendicular to a moving direction of the latent image carrying member, W represents developer carrying amount (g/sec) by the developer supplying/collecting section in the rotation axis direction,

and R represents rotation number of the developer supplying/collecting section.

32. A image formation apparatus comprising a latent image carrying member, a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member, a transferring section for transferring the toner image on the latent image carrying member to transferring material or an intermediate transferring member, a cleaning section for removing toner remained on the latent image carrying member after the toner image is transferred, and a toner recycling section for collecting the toner removed from the latent image carrying member to be reused,

wherein the toner image formation section includes the development apparatus of claim 2, and

in the housing of the development apparatus, a recycled toner mixing opening is placed above the position where the two developer stirring sections face each other and at an upstream side with respect to the toner supplying opening in the developer carrying direction in the developer stirring unit, for mixing the toner collected by the toner recycling section into the developer stirring unit.

33. An image formation apparatus comprising a latent

image carrying member and a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member,

wherein the toner image formation section includes the development apparatus of claim 11, and

following conditions (1) and (2) are satisfied:

Condition (1); $W \geq M \times V \times L/1000$

Condition (2); $R \leq 600$

where V represents a moving speed (mm/sec) of the latent image carrying member, M represents maximum toner amount attaching to one unit area in the toner image formed on the latent image carrying member (mg/cm^2), L represents maximum width (mm) of the toner image formed on the latent image carrying member in a direction perpendicular to a moving direction of the latent image carrying member, W represents developer carrying amount (g/sec) by the developer supplying/collecting section in the rotation axis direction, and R represents rotation number of the developer supplying/collecting section.

34. An image formation apparatus comprising a latent image carrying member, a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member, a transferring section for transferring the toner image on the latent image carrying member to transferring material

or an intermediate transferring member, a cleaning section for removing toner remained on the latent image carrying member after the toner image is transferred, and a toner recycling section for collecting the toner removed from the latent image carrying member to be reused,

wherein the toner image formation section includes the development apparatus of claim 11, and

in the housing structuring the development apparatus, a recycled toner mixing opening is placed above the position where the two developer stirring sections face each other and at an upstream side with respect to the toner supplying opening in the developer carrying direction in the developer stirring unit, for mixing the toner collected by the toner recycling section into the developer stirring unit.

35. An image formation apparatus comprising a latent image carrying member and a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member,

wherein the toner image formation section includes the development apparatus of claim 20, and

following conditions (1) and (2) are satisfied:

Condition (1); $W \geq M \times V \times L/1000$

Condition (2); $R \leq 600$

where V represents a moving speed (mm/sec) of the latent

image carrying member, M represents maximum toner amount attaching to one unit area in the toner image formed on the latent image carrying member (mg/cm^2), L represents maximum width (mm) of the toner image formed on the latent image carrying member in a direction perpendicular to a moving direction of the latent image carrying member, W represents developer carrying amount (g/sec) by the developer supplying/collecting section in the rotation axis direction, and R represents rotation number of the developer supplying/collecting section.

36. An image formation apparatus comprising a latent image carrying member, a toner image formation section for forming a toner image by developing an electrostatic latent image formed on the latent image carrying member, a transferring section for transferring the toner image on the latent image carrying member to transferring material or an intermediate transferring member, a cleaning section for removing toner remained on the latent image carrying member after the toner image is transferred, and a toner recycling section for collecting the toner removed from the latent image carrying member to be reused,

wherein the toner image formation section includes the development apparatus of claim 20, and

in the housing structuring the development apparatus, a recycled toner mixing opening is placed above the

position where the two developer stirring sections face each other and at an upstream side with respect to the toner supplying opening in the developer carrying direction in the developer stirring unit, for mixing the toner collected by the toner recycling section into the developer stirring unit.

37. The apparatus of claim 1, wherein, in the developer supplying/collecting unit, peripheries of the developer carrying member and the developer supplying/collecting section are moved in opposite directions to each other at a position where the developer carrying member and the developer supplying/collecting section face each other.

38. The apparatus of claim 2, wherein, in the developer supplying/collecting unit, peripheries of the developer carrying member and the developer supplying/collecting section are moved in opposite directions to each other at a position where the developer carrying member and the developer supplying/collecting section face each other.

39. The apparatus of claim 11, wherein, in the developer supplying/collecting unit, peripheries of the developer carrying member and the developer

supplying/collecting section are moved in opposite directions to each other at a position where the developer carrying member and the developer supplying/collecting section face each other.

40. The apparatus of claim 20, wherein, in the developer supplying/collecting unit, peripheries of the developer carrying member and the developer supplying/collecting section are moved in opposite directions to each other at a position where the developer carrying member and the developer supplying/collecting section face each other.

41. The apparatus of claim 1, wherein, in the housing, there is a partition between the developer supplying/collecting unit and the developer stirring unit for separating space so as to avoid mixing the developer in the developer supplying/collecting unit and the developer in the developer stirring unit;

the partition enables the developer in both the developer supplying/collecting unit and the developer stirring unit to move to each other at both edge parts in a longitudinal direction of both the developer supplying/collecting unit and the developer stirring unit; and

a space is secured between the two developer stirring

section in the developer stirring unit so as to make the developer circulate between the two developer stirring sections freely.

42. The apparatus of claim 2, wherein, in the housing, there is a partition between the developer supplying/collecting unit and the developer stirring unit for separating space so as to avoid mixing the developer in the developer supplying/collecting unit and the developer in the developer stirring unit;

the partition enables the developer in both the developer supplying/collecting unit and the developer stirring unit to move to each other at both edge parts in a longitudinal direction of both the developer supplying/collecting unit and the developer stirring unit; and

a space is secured between the two developer stirring section in the developer stirring unit so as to make the developer circulate between the two developer stirring sections freely.

43. The apparatus of claim 11, wherein, in the housing, there is a partition between the developer supplying/collecting unit and the developer stirring unit for separating space so as to avoid mixing the developer in the developer supplying/collecting unit and the developer

in the developer stirring unit;

the partition enables the developer in both the developer supplying/collecting unit and the developer stirring unit to move to each other at both edge parts in a longitudinal direction of both the developer supplying/collecting unit and the developer stirring unit; and

a space is secured between the two developer stirring section in the developer stirring unit so as to make the developer circulate between the two developer stirring sections freely.

44. The apparatus of claim 20, wherein, in the housing, there is a partition between the developer supplying/collecting unit and the developer stirring unit for separating space so as to avoid mixing the developer in the developer supplying/collecting unit and the developer in the developer stirring unit;

the partition enables the developer in both the developer supplying/collecting unit and the developer stirring unit to move to each other at both edge parts in a longitudinal direction of both the developer supplying/collecting unit and the developer stirring unit; and

a space is secured between the two developer stirring section in the developer stirring unit so as to make the

developer circulate between the two developer stirring sections freely.